RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10 809, 814

Source: IFWO

Date Processed by STIC: 11-10-04

ENTERED

IFWO

RAW SEQUENCE LISTING   DATE: 11/10/2004
PATENT APPLICATION: US/10/809,814   TIME: 15:39:17

Input Set : A:\US 1374-04 Khanuja Sequence Listing.txt
Output Set: N:\CRF4\11102004\J809814.raw

```
 5 <110> APPLICANT: KHANUJA, Suman Preet Singh et al.
 9 <120> TITLE OF INVENTION: Alpha arteether resistance domain
13 <130> FILE REFERENCE: US 1374/04
17 <140> CURRENT APPLICATION NUMBER: 10/809,814
19 <141> CURRENT FILING DATE: 2004-03-26
23 <150> PRIOR APPLICATION NUMBER: US 60/458,376
25 <151> PRIOR FILING DATE: 2003-03-31
29 <160> NUMBER OF SEQ ID NOS: 9
33 <170> SOFTWARE: PatentIn version 3.1
37 <210> SEQ ID NO: 1
39 <211> LENGTH: 21
41 <212> TYPE: DNA
43 <213> ORGANISM: Escherichia coli
47 <400> SEQUENCE: 1
48 ggtgactcgg cggtctatga c                                          21
51 <210> SEQ ID NO: 2
53 <211> LENGTH: 7
56 <212> TYPE: PRT
58 <213> ORGANISM: Escherichia coli
62 <400> SEQUENCE: 2
64 Gly Asp Ser Ala Val Tyr Asp
65 1               5
68 <210> SEQ ID NO: 3
70 <211> LENGTH: 21
72 <212> TYPE: DNA
74 <213> ORGANISM: Artificial Sequence
78 <220> FEATURE:
80 <223> OTHER INFORMATION: A forward primer for amplifying gyrase A gene
82 <400> SEQUENCE: 3
83 aatttgcgac ctttgaatcc g                                          21
86 <210> SEQ ID NO: 4
88 <211> LENGTH: 22
90 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
96 <220> FEATURE:
98 <223> OTHER INFORMATION: A reverse primer for amplifying gyrase A gene
100 <400> SEQUENCE: 4
101 ctgggtctgg gagtagaggt tg                                         22
104 <210> SEQ ID NO: 5
106 <211> LENGTH: 22
108 <212> TYPE: DNA
110 <213> ORGANISM: Artificial Sequence
114 <220> FEATURE:
```

```
116 <223> OTHER INFORMATION: A forward primer for amplifying gyrase A gene
118 <400> SEQUENCE: 5
119 atgcggtcgg tgaagttgtg ct                                              22
122 <210> SEQ ID NO: 6
124 <211> LENGTH: 22
126 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
132 <220> FEATURE:
134 <223> OTHER INFORMATION: A reverse primer for amplifying gyrase A gene
136 <400> SEQUENCE: 6
137 caaactcggt cactggcagg at                                              22
140 <210> SEQ ID NO: 7
142 <211> LENGTH: 20
144 <212> TYPE: DNA
146 <213> ORGANISM: Artificial Sequence
150 <220> FEATURE:
152 <223> OTHER INFORMATION: A forward primer for amplifying gyrase A gene
154 <400> SEQUENCE: 7
155 tgccgctgga gcaggacgaa                                                 20
158 <210> SEQ ID NO: 8
160 <211> LENGTH: 20
162 <212> TYPE: DNA
164 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:
170 <223> OTHER INFORMATION: A reverse primer for amplifying gyrase A gene
173 <400> SEQUENCE: 8
174 tcaattcaaa caagggagat                                                 20
177 <210> SEQ ID NO: 9
179 <211> LENGTH: 3066
181 <212> TYPE: DNA
183 <213> ORGANISM: Escherichia coli
187 <400> SEQUENCE: 9
188 tggcaagaca aacgagtata tcaggcattg gatgtgaata aagcgtatag gtttacctca      60
190 aactgcgcgg ctgtgttata atttgcgacc tttgaatccg ggatacagta gagggatagc     120
192 ggttagatga gcgaccttgc gagagaaatt acaccggtca acattgagga agagctgaag     180
194 agctcctatc tggattatgc gatgtcggtc attgttggcc gtgcgctgcc agatgtccga     240
196 gatggcctga agccggtaca ccgtcgcgta ctttacgcca tgaacgtact aggcaatgac     300
198 tggaacaaag cctataaaaa atctgcccgt gtcgttggtg acgtaatcgg taaataccat     360
200 ccccatggtg actcggcggt ctatgacacg attgtccgca tggcgcagcc attctcgctg     420
202 cgttatatgc tggtagacgg tcagggtaac ttcggttcta tcgacggcga ctctgcggcg     480
204 gcaatgcgtt atacggaaat ccgtctggcg aaaattgccc atgaactgat ggccgatctc     540
206 gaaaaagaga cggtcgattt cgttgataac tatgacggca cggaaaaaat tccggacgtc     600
208 atgccaacca aaattcctaa cctgctggtg aacggttctt ccggtatcgc cgtaggtatg     660
210 gcaaccaaca tcccgccgca caacctgacg gaagtcatca cggttgtct ggcgtatatt     720
212 gatgatgaag acatcagcat tgaagggctg atggaacaca tccccggggcc ggacttcccg     780
214 acggcggcaa tcattaacgg tcgtcgcggt attgaagaag cttaccgtac cggtcgcggc     840
216 aaggtgtata tccgcgctcg cgcagaagtg gaagttgacg ccaaaaccgg tcgtgaaacc     900
218 attatcgtcc acgaaattcc gtatcaggta aacaaagcgc gcctgatcga aagattgcg     960
220 gaactggtaa aagaaaaacg cgtggaaggc atcagcgcgc tgcgtgacga gtctgacaaa    1020
```

RAW SEQUENCE LISTING   DATE: 11/10/2004
PATENT APPLICATION: US/10/809,814   TIME: 15:39:17

Input Set : A:\US 1374-04 Khanuja Sequence Listing.txt
Output Set: N:\CRF4\11102004\J809814.raw

```
222 gacggtatgc gcatcgtgat tgaagtgaaa cgcgatgcgg tcggtgaagt tgtgctcaac  1080
224 aacctctact cccagaccca gttgcaggtt tctttcggta tcaacatggt ggcattgcac  1140
226 catggtcagc cgaagatcat gaacctgaaa gacatcatcg cggcgtttgt tcgtcaccgc  1200
228 cgtgaagtgg tgacccgtcg tactattttc gaactgcgta aagctcgcga tcgtgctcat  1260
230 atccttgaag cattagccgt ggcgctggcg aacatcgacc cgatcatcga actgatccgt  1320
232 catgcgccga cgcctgcaga agcgaaaact gcgctggttg ctaatccgtg gcagctgggc  1380
234 aacgttgccg cgatgctcga acgtgctggc gacgatgctg cgcgtccgga atggctggag  1440
236 ccagagttcg gcgtgcgtga tggtctgtac tacctgaccg aacagcaagc tcaggcgatt  1500
238 ctggatctgc gtttgcagaa actgaccggt cttgagcacg aaaaactgct cgacgaatac  1560
240 aaagagctgc tggatcagat cgcggaactg ttgcgtattc ttggtagcgc cgatcgtctg  1620
242 atggaagtga tccgtgaaga gctggagctg gttcgtgaac agttcggtga caaacgtcgt  1680
244 actgaaatca ccgccaacag cgcagacatc aacctggaag atctgatcac ccaggaagat  1740
246 gtggtcgtga cgctctctca ccagggctac gttaagtatc agccgctttc tgaatacgaa  1800
248 gcgcagcgtc gtggcgggaa aggtaaatct gccgcacgta ttaaagaaga agactttatc  1860
250 gaccgactgc tggtggcgaa cactcacgac catattctgt gcttctccag ccgtggtcgc  1920
252 gtctattcga tgaaagttta tcagttgccg gaagccactc gtggcgcgcg cggtcgtccg  1980
254 atcgtcaacc tgctgccgct ggagcaggac gaacgtatca ctgcgatcct gccagtgacc  2040
256 gagtttgaag aaggcgtgaa agtcttcatg gcgaccgcta cggtaccgt gaagaaaact  2100
258 gtcctcaccg agttcaaccg tctgcgtacc gccggtaaag tggcgatcaa actggttgac  2160
260 ggcgatgagc tgatcggcgt tgacctgacc agcggcgaag acgaagtaat gctgttctcc  2220
262 gctgaaggta aagtggtgcg ctttaaagag tcttctgtcc gtgcgatggg ctgcaacacc  2280
264 accggtgttc gcggtattcg cttaggtgaa ggcgataaag tcgtctctct gatcgtgcct  2340
266 cgtggcgatg gcgcaatcct caccgcaacg caaaacggtt acggtaaacg taccgcagtg  2400
268 gcggaatacc caaccaagtc gcgtgcgacg aaagggggtta tctccatcaa ggttaccgaa  2460
270 cgtaacggtt tagttgttgg cgcggtacag gtagatgact gcgaccagat catgatgatc  2520
272 accgatgccg gtacgctggt acgtactcgc gtttcggaaa tcagcatcgt gggccgtaac  2580
274 acccagggcg tgatcctcat ccgtactgcg gaagatgaaa acgtagtggg tctgcaacgt  2640
276 gttgctgaac cggttgacga ggaagatctg gataccatcg acggcagtgc cgcggaaggg  2700
278 gacgatgaaa tcgctccgga agtggacgtt gacgacgagc cagaagaaga ataatttac   2760
280 ttcttcatgc caaaagggag ctatctccct tgtttgaatt gaaaagtcca ggctgcaaag  2820
282 tctgggcttt tgtcgtatta gggcacggta aagtttggct gtgcccgtaa aaaatggctg  2880
284 gctatacaca aggaatgtgg caatgagtgg tgaaaaaaag gcgaaaggct ggcggttcta  2940
286 tggtcttgta ggttttggcg caatagcact gctttccgct ggcgtctggg cgttgcaata  3000
288 tgctggcagt gggccagaaa aaacgttgtc gccgctggtg gtgcacaaca atctgcaaat  3060
290 cgatct                                                              3066
```

VERIFICATION SUMMARY
PATENT APPLICATION: **US/10/809,814**

DATE: 11/10/2004
TIME: 15:39:18

Input Set : **A:\US 1374-04 Khanuja Sequence Listing.txt**
Output Set: **N:\CRF4\11102004\J809814.raw**